

Claims

1 1. The method of claim 5 wherein said complement receptor gene
2 encodes for a complement receptor single nucleotide polymorph which is
3 predominant in humans.

1 2. A method for correlating the ability of a cell to bind a complement
2 component, and cellular susceptibility to a disease, said method comprising:
3 identifying a complement receptor phenotype of said cell;
4 quantifying said complement component binding by said cell; and
5 comparing said complement component binding by said cell to that of a
6 second cell, said second cell having a second complement receptor phenotype.

1 3. The method of claim 2 wherein identifying said complement
2 receptor phenotype utilizes antibody binding.

1 4. A method for correlating the ability of a cell to bind a complement
2 component and cellular susceptibility to a disease, said method comprising:
3 identifying a complement receptor genotype of said cell;
4 quantifying said complement component binding by said cell expressing
5 said complement receptor genotype; and
6 comparing said complement component binding by said cell and said
7 complement component binding by a second cell, said second cell expressing a
8 second complement receptor genotype.

1 5. The method of claim 4 wherein said complement receptor
2 genotype differs from said second complement receptor genotype by a point
3 mutation.

1 6. The method of claim 5 wherein said complement receptor
2 genotype and said second complement receptor genotype are for CR1.

1 7. The method of claim 5 wherein said complement receptor
2 genotype and said second complement receptor genotype are for CR2.

1 8. The method of claim 5 wherein said point mutation is a silent
2 mutation.

1 9. The method of claim 5 wherein said point mutation is a frame
2 shift mutation.

1 10. The method of claim 5 wherein said point mutation is a missense
2 mutation.

1 11. The method of claim 6 wherein said point mutation is a missense
2 mutation in nucleotide 5932.

1 12. The method of claim 11 wherein said missense mutation is within
2 a codon for an amino acid selected from the group consisting of alanine and
3 threonine.

1 13. The method of claim 4 wherein said cell is selected from the
2 group consisting of: erythrocyte, B lymphocyte, granulocyte, monocyte,
3 neutrophil and T cell.

1 14. The use of a single nucleotide polymorphism in a complement
2 receptor genotype to identify individual susceptibility to a disease.

1 15. The use of claim 14 wherein said disease is selected from the
2 group consisting of: cancer, viral infection, bacterial infection, systemic lupus
3 erythematosus, systemic vasculitis, hemolytic anemia, AIDS, rheumatoid
4 arthritis, systemic sclerosis, glomerulonephritides, Sjogren's syndrome and
5 lepromatous leprosy.

1 16. The use of claim 14 wherein the single nucleotide polymorphism
2 is at a codon 1969.